**“Designing the Future ERC”—Workshop Process**

Planning for the 2007 annual meeting originally began with the idea of conducting a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of the ERC Program and examining the Performance Indicators for ERCs, focusing on key features at the center level and policies at the Program level. [Link to “Purpose\_2007 ERC ann mtg\_final2.doc] But the plan quickly evolved into focusing solely on “Designing the Future ERC.” CASA ERC Director David McLaughlin was chosen to lead the effort. Directors of four recently graduated centers presented their “lessons learned” about operating an ERC, which contributed to these deliberations.

During the second day of the annual meeting, ERC meeting participants were assigned to 12 working-group breakout sessions, all of which were directed first to discuss and identify strengths and shortcomings of a broadly defined set of combined Gen-2 and Gen-3 ERC key features, answering a specified set of questions about each. These “key features” were [Link to file “Key Features—Gen-2 cf Gen-3.doc”]:

1. Transformational Engineered Systems Vision

2. 3-Plane Systems Motivated Strategic Research Plan

3. Cross-Disciplinary Research Program

4. University-level Education Program

5. Pre-college Education Program

6. Industrial Collaboration

7. Partnerships for Innovation

8. Infrastructure

9. NSF Funding/Oversight

In the second portion of the breakouts, participants discussed the Design of the Future ERC, focusing on its key features. Each working group had a moderator, and scribes summarized the main points of discussion and agreement.

Findings and recommendations of all the working groups were then integrated into a single report synthesized by a selected group of 12 participants who met over dinner and later into the evening. The Synthesis Group members developed three outputs: (1) a synthesized list and brief description of each of the key features and characteristics of a Future ERC (with rationale), (2) a presentation/briefing for the following morning plenary session summarizing their findings, and (3) a list of six issues or topics that they felt required additional discussion and clarification.

The following morning, Dr. McLaughlin led the reporting-out of the Synthesis Group to the annual meeting attendees in a plenary session that included Q&A from the audience with all Synthesis Group members. The meeting attendees then broke into six separate groups to expand on the Future ERC key features in terms of the six additional topics or issues identified by the Synthesis Group. Scribes again summarized the main points of discussion and agreement. The moderators of these breakouts then met with the chair and co-chair of the Synthesis Group immediately following meeting adjournment to compile an organized findings summary, which was given to NSF. After the meeting, those findings were formalized into the report, “ERC Key Features: Designing the Next-Generation ERC.” [Link to report] The overall finding emerging from this effort was that the existing set of combined Gen-2/Gen-3 ERC key features was generally excellent and should be retained, with some modifications to the characteristics of a few features.